



Service Manual

Dishwasher

Compact

200 380 21

DWF 407 W

Model	200 380 21	
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Technical data

Dimension of Full Door appliances

Height	82.0 - 87.0	cm
Width	44.8	cm
Depth	57.0	cm
Weight	43	kg

Wooden door for Full Door appliances

Thickness min.	16	mm
Thickness max.	20	mm
Width min.	442	mm
Width max.	448	mm
Height min.	650	mm
Height max.	720	mm
Weight min.	2.5	kg
Weight max.	6.2	kg
Max. stick out over lower edge of appliance door	90	mm
Height of plinth min.	93	mm

Electronic boards

Service boards	see spare part list
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Succession of programs

Programs	see program diagram
Succession	Prewash Rapid 45° Bio/Eco 55° Normal 65° Intensive 70°

Datas Energy Label

Energy Performance	B
Cleaning Performance	B
Drying Performance	C
Reference program	Bio/Eco 55°

Alarms

Refill rinse aid
Refill salt

Program information

End - Acoustic signal

All programs will be locked after start. Changing the program or finishing the program will be possible only after pressing the start button for longer then 1.5 sec. (Break by customer)

A switching off the appliance or unplug the appliance for a while, this will frozen the program step and later on, the program continuos on the same position.

Exception: Switching off the appliance or unplug the appliance during the drying phase, this will lead directly to the end of the program.

Volume

Detergent	5+25	gr
Clear rinse containing	140	ccm
Rinse dosage per step	1	ccm
Capacity	9 stand. place settings	
Water connection up to	60	°C

Water pressure

Inlet pressure	0.5 - 9	bar
Spray pump pressure	~ 0.3	bar

Rotations

Spray pump motor	2850 ± 20RPM
Drain pump motor	2500 RPM

Electrical base data

Voltage	220 - 230	V
Frequency	50	Hz
Total power	2.2	kW
Fuse	10	A

Technical data**Motor****Spray pump motor**

Voltage	220/ 240	V
Power consumption	150	W
HI	~ 45	Ω
HA	~ 54	Ω
Capacitor	6	μ F

Drain pump motor

Voltage	220/ 240	V
Frequency	50	Hz
Power consumption	38	W
Resistance	~ 146	Ω

Heating**1 Element flow through system**

Voltage	220/ 230	V
Power consumption	2.05	kW
Resistance	24.5	Ω
Heating speed	~ 2.0	$^{\circ}$ C/min
Temperature on surface	~ 115	$^{\circ}$ C
Safety thermostat self reset		
(Temperature of water)	~ 85	$^{\circ}$ C
Fuse	206	$^{\circ}$ C

Double electric inlet valve ELTEK

Voltage	220/ 240	V
Frequency	50/ 60	Hz
Resistance	~ 2.0	k Ω

Safety system against water-leakage?

Aquastop + floater switch
(Floater switches of the inlet valve and on the drain pump)

Regeneration valve

Voltage	220-240	V
Power consumption	6	W
Resistance	~ 3.75	k Ω

NTC

23 $^{\circ}$ C	~ 14	k Ω
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Water measuring

Remove the coases sieve, put into the sump a meassuring meter, look the height of the water level

Working level	110	mm
Safety level	125	mm

Coil of dispenser

Voltage	220/ 240	V
Frequency	50/ 60	Hz
Resistance	~ 1.2	k Ω

Regeneration and Volumes

Salt container volume	1.5	kg
Volume for regeneration	320	cm ³
Steps to set the water softening system	5	
Default Water hardness setting	3	
Number of washing cycles with 1.5 kg salt	20	

Position of selector setting	German degrees $^{\circ}$ dH	French degrees $^{\circ}$ fH
Setting N.1 NO SALT	0 - 4	0 - 7
Setting N. 1	5 - 9	8 - 15
Setting N. 2	10 - 17	16 - 30
Setting N. 3	18 - 26	31 - 45
Setting N. 4	27 - 35	46 - 60
Setting N. 5	36 - 47	61 - 80

Spare part list

Model 200 380 21
Service No. 854585601600
Version 854585601600

Pos. No.	12NC Code	Description
004 0	4812 905 08205	Drip tray assy
011 0	4812 905 08128	Foot
012 2	4812 905 08148	Fixation
012 3	4819 905 01036	Fastener
022 0	4812 905 08204	Support left
022 1	4812 905 08203	Support right
024 0	4812 905 08211	Container
040 0	4812 905 08162	Frame left
040 1	4812 905 08161	Frame right
040 2	4812 905 08198	Hinge right
040 3	4812 905 08199	Hinge left
040 4	4812 905 08208	Container
044 0	4812 905 08201	Spring
053 0	4812 905 08202	Plinth
065 0	4819 905 00692	Insulation door
066 0	4812 905 08206	Cover
100 1	4819 905 00001	Spacer Rubber
103 0	4812 905 08174	Door
110 0	4819 905 01303	Handle protection
120 0	4812 905 08193	Door Inner
120 0	4812 905 08356	Door,inner - 05/2003
130 0	4812 905 08416	Door lock - 05/2003
130 0	4819 905 01147	Lock
130 3	4812 905 08127	Bracket
131 0	4819 905 01178	Tilt lock
170 2	4812 905 08139	Front,panel
176 1	4819 905 00036	Protector
191 0	4819 905 00569	Gasket, door from 96/12
191 1	4812 905 08197	Protector
191 3	4812 905 08004	Corner piece
191 4	4812 905 08179	Bracket right
191 5	4812 905 08181	Bracket left
191 6	4812 905 08164	Foot Base.
191 7	4812 905 08163	Gasket
191 8	4812 905 08214	Gasket
241 0	4812 905 08195	Basket upper cpl.
241 1	4812 905 08159	Guide
241 3	4819 905 01224	Wheel,basket upper
241 4	4819 905 01225	Bushing
242 0	4819 905 01208	Basket lower
242 1	4819 905 00675	Wheel,basket lower
243 5	4819 905 00089	Basket cutlery
243 6	4819 905 01238	Holder f.spoons
261 0	4819 905 01214	Guide f.basket
261 1	4812 905 08146	Basket Flap
261 2	4819 905 01226	Tailpiece ahead
261 3	4819 905 01217	Tailpiece guide
263 0	4819 905 01215	Small plate support
301 1	4812 310 28261	Fastener KIT
322 0	4812 905 08178	Panel Strip
332 0	4812 905 08136	Push button
332 1	4812 905 08142	Lever
332 3	4812 905 08144	Switch on/off
351 0	4812 905 08137	Guide,light
351 1	4812 905 08143	Guide,light

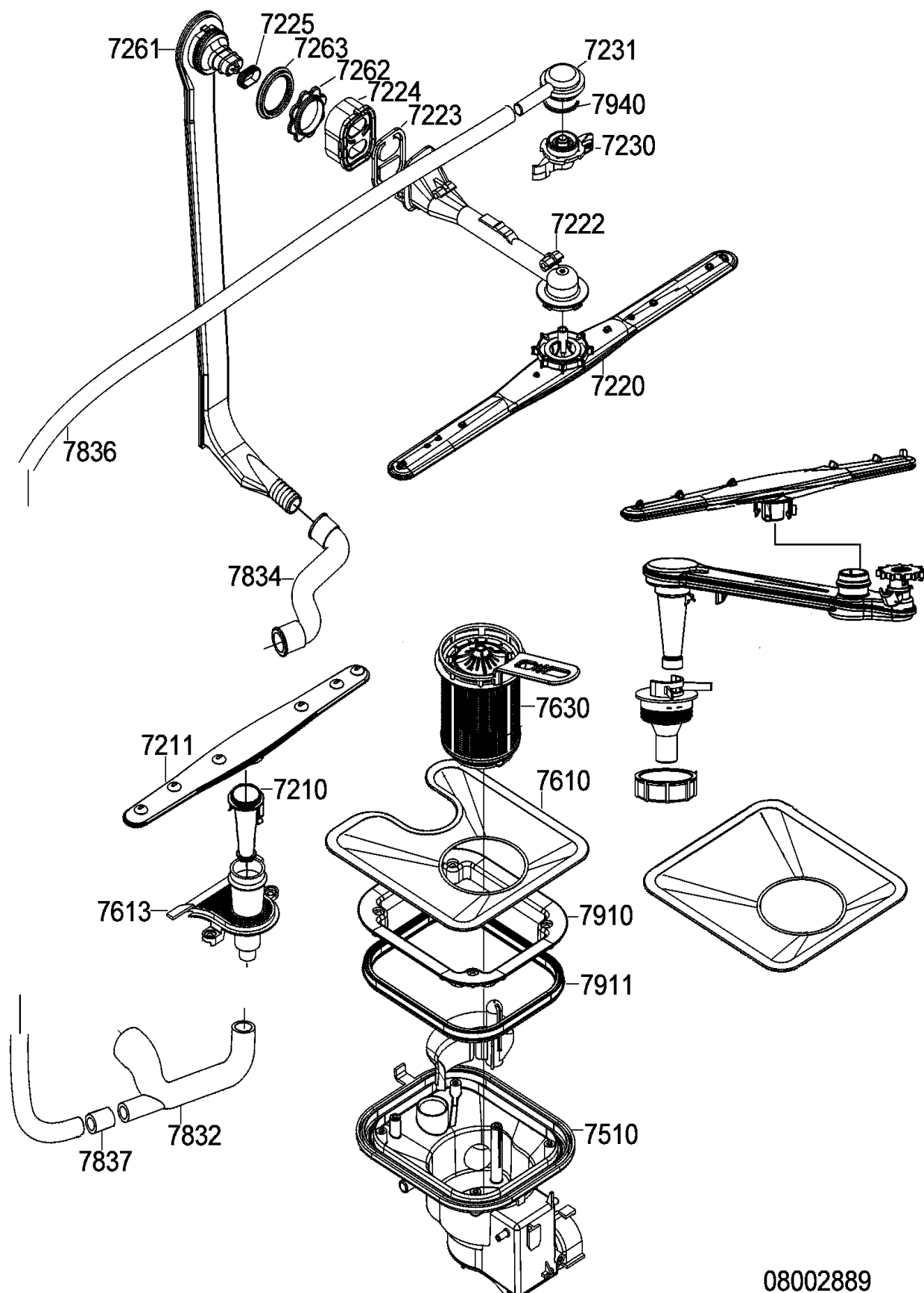
Pos. No.	12NC Code	Description
400 0	4812 905 08165	Spray pump
405 0	4812 905 08166	Motor Support
420 0	4819 905 00158	Capacitor
430 0	4812 905 08156	Pump,draining
450 0	4812 259 28684	Heating element
450 1	4812 905 08191	Hose
480 3	4819 905 00002	Gasket
490 0	4812 905 08155	Cable
552 0	4812 210 78011	Thermostat
571 0	4812 905 08158	Interf.filter
583 0	4812 905 08194	Pressostat
620 0	4812 905 08141	Timer
620 1	4812 905 08138	Protector
621 0	4812 905 08126	Switch ON/OFF
633 0	4819 905 01146	Microswitch door
680 0	4819 905 01044	Combidosage electr. Indication
680 1	4819 905 00026	Gasket border Combidosage
680 2	4819 905 00027	Fastener combidosage
700 0	4812 905 08209	Hose, inlet aquastop 1valve
701 1	4812 905 08176	Bracket valve
710 0	4812 905 08154	Monoblock with Reed
710 2	4812 905 08152	Monoblock Nut
714 0	4812 905 08153	Threaded cap
716 0	4812 905 08151	Reg.dosage
716 1	4812 905 08133	Gasket
716 2	4812 905 08132	Collar
721 0	4819 905 01145	Hub f.sprayer lower
721 1	4819 905 00067	Spray arm below
722 0	4812 905 08145	Spray arm upper
722 2	4812 905 08212	Connection
722 3	4812 905 08207	Flap non-return
722 4	4812 905 08213	Connection
722 5	4819 905 01223	Gasket
723 0	4819 905 01218	Spray arm ceiling
723 1	4812 905 08131	Nozzle Ceiling
726 1	4812 905 08183	Hose
726 2	4812 905 08185	Threaded ring
726 3	4812 905 08184	Gasket
751 0	4812 905 08169	Water collector
756 0	4812 905 08188	Floater
761 0	4812 905 08171	Filter
761 3	4812 905 08172	Support
763 0	4812 905 08173	Filter
781 0	4812 905 08135	Hose,draining
781 3	4812 905 08157	Gasket
781 4	4819 905 01144	Rubber Motor
783 1	4812 905 08187	Hose
783 2	4812 905 08168	Hose Pump
783 3	4812 905 08149	Hose
783 4	4812 905 08182	Hose
783 5	4812 905 08189	Hose
783 6	4812 905 08192	Hose
783 7	4819 905 01197	Hose
783 8	4812 905 08196	Drainhose
791 0	4812 905 08186	Flange

Spare part list

Model 200 380 21
Service No. 854585601600
Version 854585601600

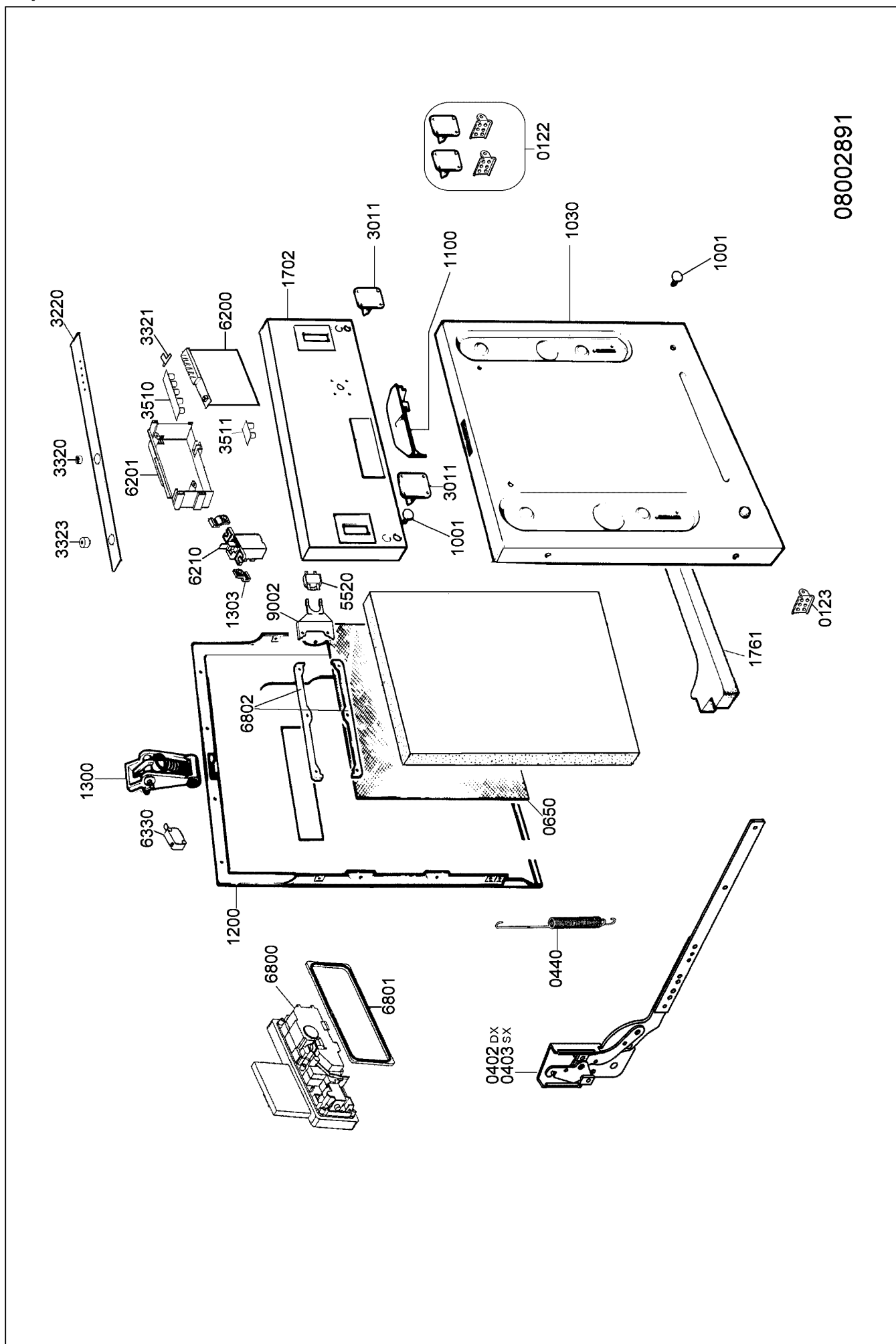
Pos. No.	12NC Code	Description
791 1	4812 905 08167	Gasket
794 0	4819 905 01143	Gasket ceiling sprayer
900 2	4819 905 00494	Holder Thermostat
904 0	4812 905 08147	Stopper & 1201
993 5	4819 905 00033	Funnel

Exploded view

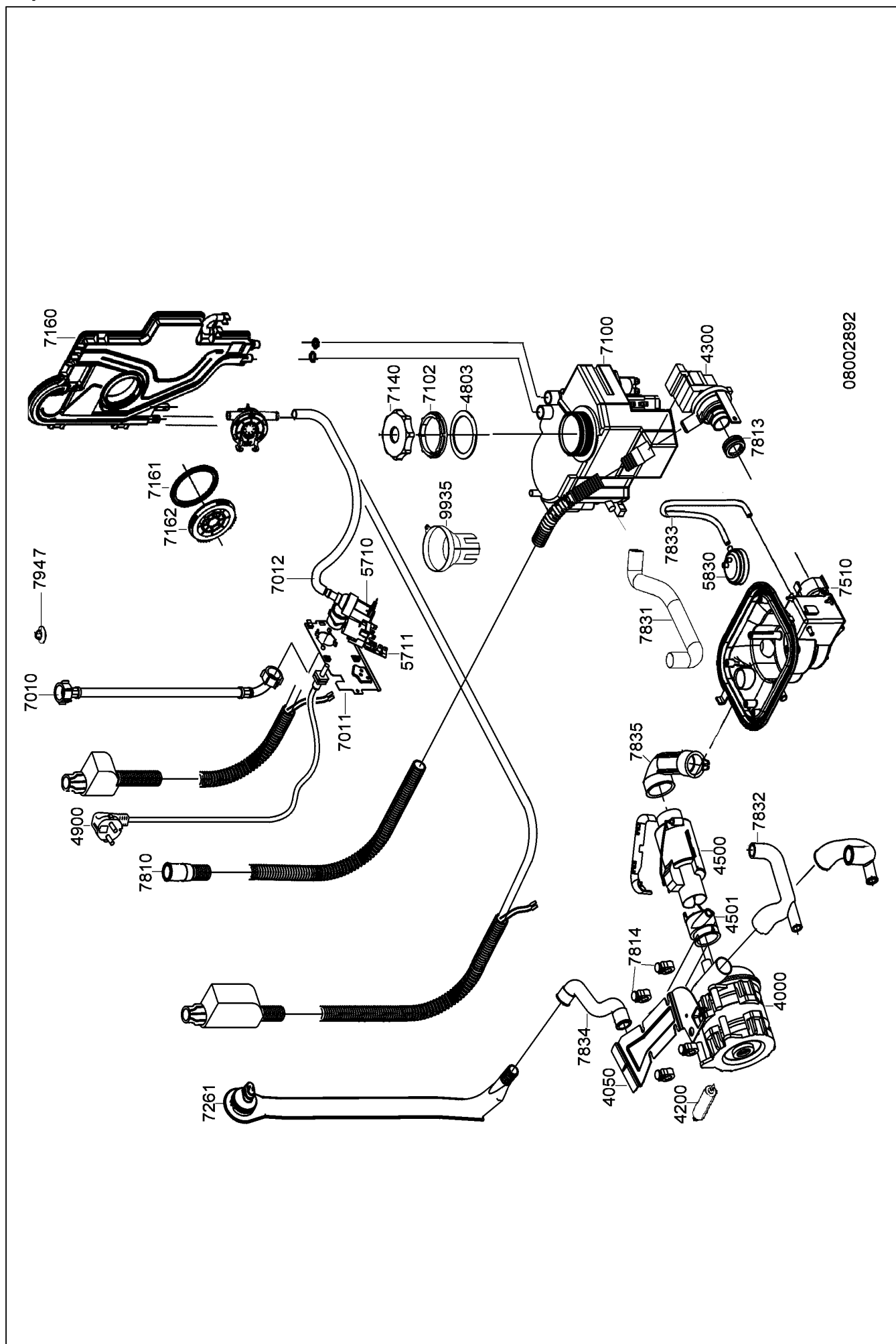


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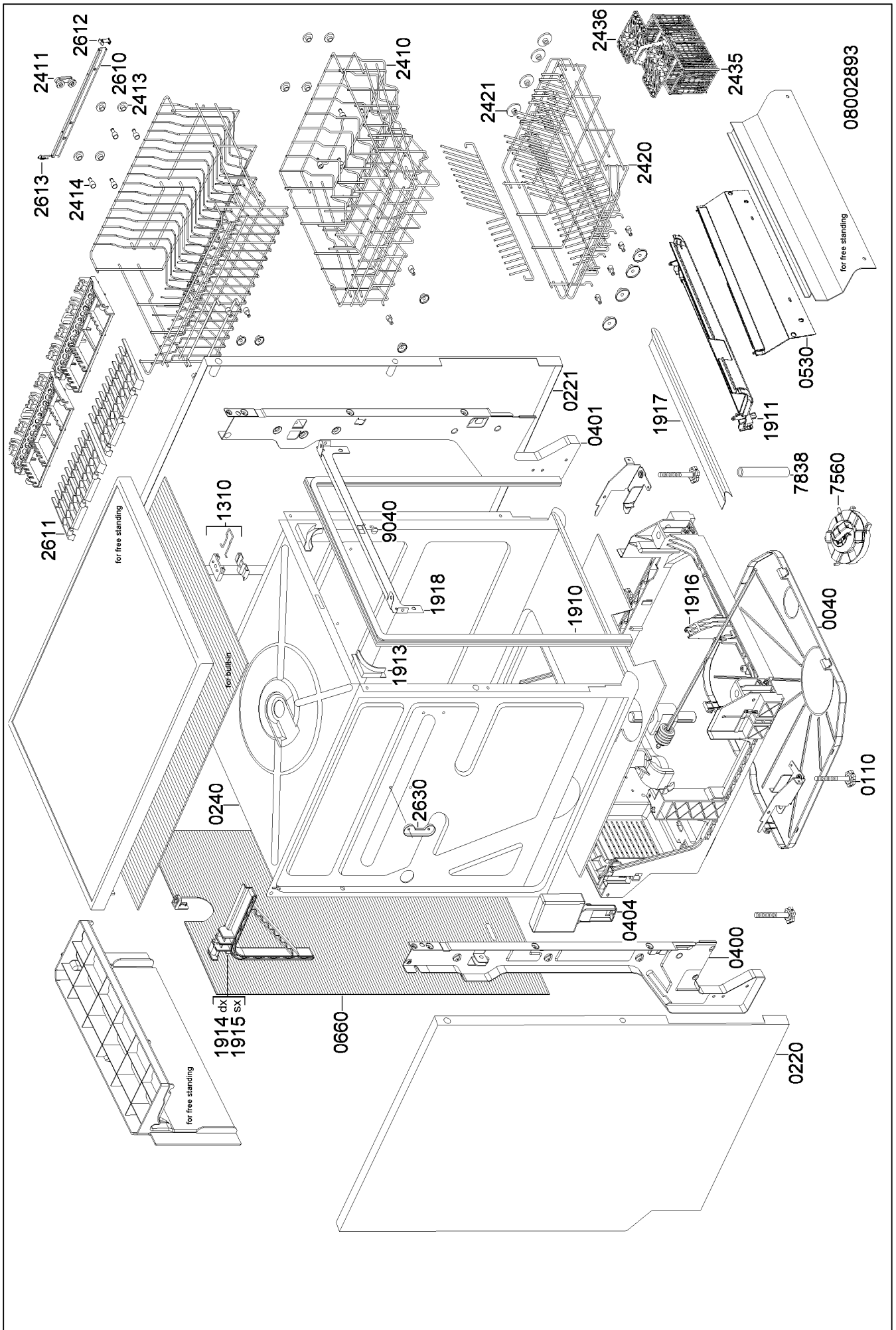
Exploded view



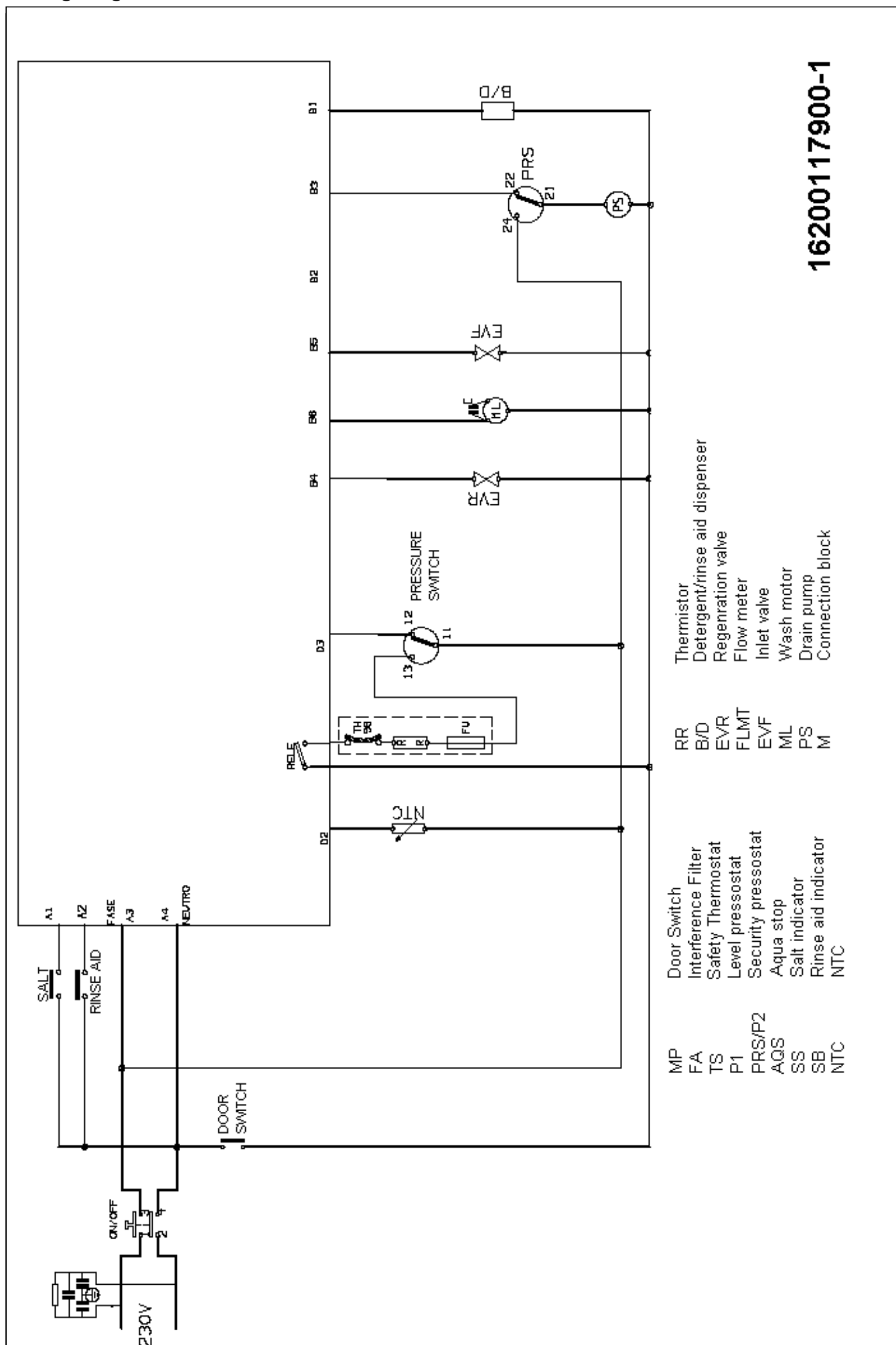
Exploded view



Exploded view



Wiring diagram



[illegible]

Text/Legend

6-Cycle of testing

In these dishwasher models it is possible to run a test cycle that allows the user to verify all the functionalities of the machine. This test cycle is not directly available to the consumers, it is selected through a secret combination sequence:

Open the door, turn on the machine and press the program button 4 times within 3 seconds.

The test cycle is selected when an indication appears on the LEDs:



- = ON
- = OFF
- * = Flashing

Phase	Description	LED Display
1	TEST CYCLE SELECTION The test cycle represented from the SOAKING and LEDs that flash is related to the versions with whirlwind. In the case of version without whirlwind (MEDIA4) press the Push button programs to select the cycle of testing without whirlwind. The configuration of the LEDs will be:	○○○○*
2	START OF TEST Close the door; after 5 seconds the machine begins to fill (30 seconds with the motor off, then 30 seconds at full pressure with the motor on)	●○○○*
3	DETERGENT DISPENSER At the end of the water filling step the detergent dispenser is fed with water for 60 seconds (the opening must be verified at the end of the cycle)	○●○○*
4	HEATING The machine heats until the temperature is 50°C (*)	●●○○*
5	TESTING THE HEATER When the correct water temperature is reached the machine emits a beep. During this phase the regeneration valve is fed with water. To continue the cycle the operator must press programs button.	○○●○*
6	TESTING THE WATER LEVEL SWITCH The machine continues to pump in water until the level switch activates. Activate the floater switch by hand until and acoustic sound is heard. The machine will begin to pump out.	○○○●*
7	ATTENDING OPERATIVE INTERVENTION When the level switch functions the machine emits a beep. During this phase the regeneration valve is fed with water. To continue the cycle the operator must press the key Programs	●○○●*
8	FINAL DRAINAGE After pressing the program button, the machine starts draining until empty 28 seconds (with EVR in Function)	●○○●*
9	FINAL TEST After the draining step is finished, the machine ends the test program and flashes all the LEDs. Open the door and verify that the detergent dispenser is open. Turn off the machine.	* * * * *

*) It is possible to jump to the next phase during the heating phase (from 4 to 5) by pressing the program button once.

08003075

Text/Legend






IMPORTANT



- a) The test cycle once selected must be completed. If there is any interruption the program will continue from where it was stopped.
- b) If you want to reset the test cycle, you must:
- Turn off the machine.
 - Repeat the procedure to recall the test program (**Open the door, turn on the machine and press the program button 4 times within 3 seconds**).
 - Turn off the machine.

To this point it is reset the cycle of testing and it is possible to select one any of the foreseen programs.

Troubleshooting

The dishwasher is capable of signalling a number of faults through the simultaneous illumination of several indicators lights (LEDS), with the following meanings:

FAULT	DESCRIPTION
E1 	The dishwasher's anti-flooding system has been activated (only for models equipped with the "TOTAL AQUASTOP" device). This alarm is triggered in the event of a water leak in the dishwasher. In such circumstances the technical service centre must be called.
E3 	The dishwasher fails to heat the water. Repeat the wash program. If the problem persists, contact the customer technical service centre.
E4 	The temperature monitoring system has failed. Switch the dishwasher off, switch it back on and restart the washing program. If the alarm recurs, call the After Sales Service.
E5 	The dishwasher fails to draw water. Ensure the plumbing connections are in order and the water supply tap is open.
E6 	The dishwasher fails to drain. Check that the drain hose is not kinked, the siphon is not obstructed and the filters are not clogged.

Light off Light on Light flashing 

If an alarm occurs the appliance interrupts the program in progress and signals a fault.

- In case of **E1**, **E3** and **E4**, the washing program must be set again to continue.
- In case of **E5** and **E6**, simply open and close the door to continue (once the cause of the fault has been illuminated).

Text/Legend

Alarms

In case of dishwasher malfunction, it displays an alarm symbol.

E1 Alarm:     

The anti- flooding system has tripped

E3 Alarm:     

The machine is unable to heat the water

E4 Alarm:     

The temperature sensor is disconnected

E5 Alarm:     

The machine is unable to fill the water

E6 Alarm:     

The machine is unable to drain the tank

E7 Alarm:     

Turbine flow regulator malfunction (where applicable)

E9 Alarm:     

Tank fill limit exceeded (only for versions with turbine flow regulator)

 the led flashes

 the led is on

 the led is off

Alarms E1, E3, E4, E9 interrupt the program in execution whereas for alarms E5, E6, E7, once the fault has been resolved, the alarm must be reset in one of the following ways before continuing:

- open and close the door
- open the door and press the program button

The program will now continue when the door is closed.

Troubleshooting

E1 – Flooding

This alarm is displayed when the anti-flooding system float switch is closed for more than 3 minutes by water in the sump. In this situation the drain pump will operate until the switch returns to the open position.

It is therefore necessary to check for leaks in the tank, from the acquastop hose or components in the appliance's base (wash/draining pump, softener, etc.).

The flood system may also be tripped by an excessive fill; in these dishwashers, if so much water is filled as to overflow from the tank, the overflow is conveyed inside the sump and this trips the flooding system. This may be due to a malfunction of the pressure switch which fails to supply the full tank signal; the machine will thus continue to fill, the water will overflow from the tank and the flooding system will trip.

Special cases:

If no water is found in the sump, check that the float is incorrectly positioned, thus keeping the switch closed.

Text/Legend

E3 – Heating system defect

This alarm displays when heating is too slow (less than 1.5 °C in 20 minutes). This fault can be due to:

- Defective heating element
- Temperature sensor incorrectly positioned
- Wash pump fault (no water delivery)
- Spray arm/s do not turn freely
- Heating element or timer board connections incorrectly installed
- Defective relay (electronics board)

E4 – Temperature sensor disconnected

This alarm displays when the machine is switched on if the temperature sensor is disconnected. This defect is seldom spontaneous; it is more likely that it is due to maintenance work involving the cables, such as replacement of the electronics board or detergent dispenser. If this alarm displays, check the electrical connections on the temperature sensor and electronics board.

E5 – No water filling

This alarm displays during filling if the required quantity of water does not fill within 5 minutes.

This fault can be due to:

- water valve closed
- fill hose blocked or kinked
- fill solenoid valve defective
- electrical connections incorrectly installed
- electronics board defective

E6 – Draining defect

This alarm displays during draining if the empty signal (PL0) is not supplied within 3 minutes; the drain cycle is run 3 times for one minute each, after which the alarm displays.

This fault can be due to:

- Drain pump defect
- Level pressure switch defect (the contact is locked on full)
- Drain hose incorrectly positioned, blocked or kinked
- electrical connections incorrectly installed
- electronics board defective

E7 – Turbine flow regulator defective (where applicable)

This alarm displays when the timer board does not receive the signal from the turbine flow regulator. The alarm is given during filling if when the full tank signal is supplied (PL1) the turbine flow regulator does not read the signal.

This fault can be due to:

- turbine flow regulator defective
- turbine flow regulator electrical connections wet
- electrical connections incorrectly installed
- electronics board defective

E9 – Tank fill limit exceeded (only versions with turbine flow regulator)

This alarm displays when the fill limit of 7.5 litres is reached without the full tank signal being supplied (PL1). In this case the appliance interrupts the program and displays the alarm.

This fault can be due to:

- defective level pressure switch
- electronic board failure to read the full signal